

PTO/SB/01A (10-01)
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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

VACCINES TO INDUCE MUCOSAL IMMUNITY

As the below named inventor(s), I/we declare that: This declaration is directed to: The attached application, or Application No. 10/613,975, filled on	
The attached application, or Application No. 10/613,975 , filed on July 3, 2003 , as amended on	As the below named inventor(s), I/we declare that:
Application No. 10/613,975	This declaration is directed to:
I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought; I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above; I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application. All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon. FULL NAME OF INVENTOR(S) Inventor one: Donald L. Wise Signature: Debra J. Trantolo Signature: Citizen of: United States Inventor three: Signature: Citizen of: United States Inventor four: Stephen A. Doherty Signature: Citizen of: United States	• •
I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought; I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above; I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filling date of the prior application and the national or PCT International filling date of the continuation-in-part applications, material information which became available between the filling date of the prior application and the national or PCT International filling date of the continuation-in-part application. All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon. FULL NAME OF INVENTOR(S) Inventor one: Donald L. Wise Signature: Debra J. Trantolo Citizen of: United States Inventor four: Stephen A. Doherty Signature: Citizen of: United States	Application No. 10/613,975, filed on July 3, 2003,
which a patent is sought; If we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above; If we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application. All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon. FULL NAME OF INVENTOR(S) Inventor one: Donald L. Wise Signature: Debra J. Trantolo Signature: Citizen of: United States Inventor three: David D. Hile Signature: Citizen of: United States Inventor four: Stephen A. Doherty Signature: United States	as amended on(if applicable);
amended by any amendment specifically referred to above; I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filling date of the prior application and the national or PCT International filling date of the continuation-in-part application. All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon. FULL NAME OF INVENTOR(S) Inventor one: Donald L. Wise	
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Inventor one: Donald L. Wise Signature: Wise Wise Citizen of: United States Inventor two: Debra J. Trantolo Signature: David D. Hile Signature: David D. Hile Signature: Citizen of: United States Inventor three: Stephen A. Doherty Signature: Stephen A. Doherty Signature: Citizen of: United States	belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may
Signature: Debra J. Trantolo Signature: Debra J. Trantolo Signature: David D. Hile Signature: David D. Hile Signature: David D. Hile Signature: Stephen A. Doherty Signature: Signature: Stephen A. Doherty Signature: David C. Citizen of: United States United States United States United States United States	FULL NAME OF INVENTOR(S)
Inventor two: Debra J. Trantolo Signature: David D. Hile Signature: David D. Hile Signature: Divid T. H.L. Citizen of: United States United States United States United States Citizen of: United States United States United States Citizen of: United States	inventor one.
Signature: David D. Hile Signature: David D. Hile Signature: David D. Hile Citizen of: United States Inventor four: Stephen A. Doherty Signature: Citizen of: United States Citizen of: United States	Signature: Citizen of: United States
Inventor three: David D. Hile Signature: David D. Hile Citizen of: United States Inventor four: Stephen A. Doherty Signature: Citizen of: United States	Inventor two: Debra J. Trantolo
Signature: Divd V. Zf. L Citizen of: United States Inventor four: Stephen A. Doherty Signature: Citizen of: United States Citizen of: United States	Signature: D. V. Trantla Citizen of: United States
Inventor four: Stephen A. Doherty Signature: Citizen of: United States	Inventor three: David D. Hile
Signature: Citizen of: United States	Signature: David V. 74. Citizen of: United States
Citizen or.	Inventor four: Stephen A. Doherty
<u>-</u>	Signature: Citizen of: United States
Additional inventors are being named onadditional form(s) attached hereto. Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The Information is used by the public to file (and the USPTC)	

burden nour statement: In solitection of information is required by 35 U.S.C. 119 and 37 CFR 1.31. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

SEP 1 5 20(B) ease type a plus sign (+) inside this box —

PTO/SB/81 (02-01)

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POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

10/613,975
July 3, 2003
Donald L. Wise
Vaccines to Induce Mucosal Immunity
CSI 130

I hereby appoint:			
Practitioners at Customer Number 23579			
OR Practitioner(s) na	imed below:	PATEN	NT TRADEMARK OFFICE
	Name	Registration	Number
Patrea L. Pab	st	31,284	
Zhaoyang Li		46,872	
Rivka D. Mo	nheit	48,731	
Todd S. Hofn	neister	53,029	
		antifical above and	o transact all
	r agent(s) to prosecute the application ide States Patent and Trademark Office cont		to transact all
	espondence address for the above-identi		
	ned Customer Number.	111011 11111	HITA CITY ATTIC IZM ATTL
OR	<u></u>		
Practitioners at Cu	stomer Number	 LaDeR	er Bar Code" h & 70
OR		PATENT TR	ADEMARK OFFICE
Firm or Individual Name	Patrea L. Pabst; Holland & Knight LLP		
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City	Atlanta	State GA	Zip 30309-3400
Country	USA		
Telephone	(404) 817-8473	ax (404) 817-8588	
I am the:			
Applicant/Invent	or.		
(F) A : (1.60	• 4	i
Assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).			
SIGNATURE of Applicant or Assignee of Record			
Name Debra J. Trantolo			
Signature DM Trantolo			
Date / July 16, 2003			
NOTE: Signatures of all the invertorms if more than one signature	ntors or assignees of record of the entire interest or is required, see below*.	r their representative(s)	are required. Submit multiple
	rms are submitted.		

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/96 (08-00)
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STATEMENT UNDER 37 CFR 3.73(b)

SEP 1 5 2003

Applicant/Patent Owner: Donald L. Wise, Debra J. Trantolo, David D. Hile, and Stephen A. Doherty
Application No./Patent No.: 10/613,975 Filed/Issue Date: July 3, 2003
Entitled: Vaccines to Induce Mucosal Immunity
Cambridge Scientific, Inc., a corporation of the Commonwealth of Massachusetts,
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
states that it is:
1. X the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest. The extent (by, percentage) of its ownership interest is%
in the patent application/patent identified above by virtue of either:
A. X An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
OR
B. [] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:
1. From:To:
The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
2. From:To:
The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
3. From:To:
The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
[] Additional documents in the chain of title are listed on a supplemental sheet.
[] Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.
July 16, 2003 Debra J. Trantolo
Date Typed or printed name
Schraf Tranto
President & CEO
Title

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

ASSIGNMENT

We, Donald L. Wise of 195 Common Street, Belmont, Massachusetts 02176; Debra J. Trantolo of 28 Radford Road, Princeton, Massachusetts 01541; David D. Hile of 183 Fulton Street, Medford, Massachusetts 02155; and Stephen A. Doherty of 44 North Main Street, Newmarket, New Hanpshire 03857, in consideration of ten dollars and other valuable consideration paid to us by Cambridge Scientific, Inc., a corporation of the Commonwealth of Massachusetts, having its principal place of business at 180 Fawcett Street, Cambridge, Massachusetts 02138 (hereinafter "said Assignee"), the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Assignee, its successors and assigns, the entire interest for the United States of America, and its territories and all foreign countries and jurisdictions, including all rights of priority under the International Convention for the Protection of Industrial Property, in a certain invention or improvement in "Vaccines to Induce Mucosal Immunity" described in U.S. Serial No. 10/613,975 filed in the United States Patent and Trademark Office on July 3, 2003, by Donald L. Wise, Debra J. Trantolo, David D. Hile, and Stephen A. Doherty, and in the provisional application to which priority is claimed, being U.S. Provisional Application Serial No. 60/393,777 filed in the United States Patent and Trademark Office on July 3, 2002, and in all Letters Patent of the United States and its territories and all foreign countries and jurisdictions which may or shall be granted on said invention, or any parts thereof, or on said application, or any provisional, divisional, continuation, continuation-in-part, reissue, or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said Assignee and its successors and assigns, but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and its territories and in all other foreign countries and jurisdictions to said Assignee, with specifications and claims in such form as shall be approved by the counsel of said Assignee, and to vest and confirm in said Assignee, its successors and assigns, the legal title to all such patents.

Title: "Vaccines to Induce Mucosal Immunity"
By: Donald L. Wise, Debra J. Trantolo,

David D. Hile, and Stephen A. Doherty

Filed: July 3, 2003 ASSIGNMENT

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said Assignee, its successors and assigns.

WITNESS my hand and seal this 16#	day of <u>July</u> , 2003.
	Donald For Win
	Donald L. Wise
Commonwealth of Massachusetts) County of	
Then personally appeared the above name foregoing instrument to be his free act and deed,	
	Kenneth Hoold Notary Public
KENNETH HOELZL Notary Public My Commission expires My Commission Expires Sept. 17,	2004 —

Title: "Vaccines to Induce Mucosal Immunity"
By: Donald L. Wise, Debra J. Trantolo,
David: D. Hile, and Stephen A. Doherty
Filed: July 3, 2003
ASSIGNMENT

Title: "Vaccines to Induce Mucosal Immunity"
By: Donald L. Wise, Debra-J. Trantolo,
David D. Hile, and Stephen A. Doherty
Filed: July 3, 2003
ASSIGNMENT

WITNESS my hand and seal this _	16+h	_day:of	July	, 2003.
		Dair	David D.	Hile
Commonwealth of Massachusetts County of Wassachusetts)=- _)			
Then personally appeared the abordoregoing instrument to be his free act and 2014, 2003.			_	_
KENNETH Notary Pi My Commission Expire My Commission expires:	uhlia		Notary Po	Olic

Title: "Vaccines to Induce Mucosal Immunity"
By: Donald L. Wise, Debra J. Frantolo,
David D. Hile, and Stephen A. Doherty
Filed: July 3, 2003
ASSIGNMENT

WITNESS my hand and seal this 16 **	day of July , 2003.
	Stephen A. Doherty
County of Mass County of Mass Then personally appeared the above name the foregoing instrument to be his free act and de	ed Stephen A. Doherty and acknowledged eed, before me this/(day of
KENNETH HOELZL Notary Public My Countission expires My Commission Expires Sept. 17, 2	Notary Public

ATL1 #584527 v1